

GAwC Renewables

Global Wind Report 2026

Markets to Watch · Market Status 2025 · Market Outlook
2026–2030

165 GW installed in 2025 | 1,299 GW total | 5.2% CAGR to 2030

What this deck covers

03

Markets to Watch

APAC & Central Asia, Middle East & Africa, Latin America — policy, projects, investment and constraints across 15 markets.

04

Market Status 2025

A record 165 GW commissioned. Regional and technology breakdown, leading markets, support mechanisms and offshore status.

05

Market Outlook 2026–2030

969 GW of new capacity expected, 5.2% CAGR. Growth drivers, regional forecasts and the risks to delivery.

Markets to Watch

Fifteen markets shaping the next phase of global wind deployment

Asia Pacific & Central Asia: the engine room

80%

APAC share of 2025 global new installations

126 GW+

Added by China and India combined in 2025

640 GW

China cumulative wind capacity (47 GW offshore)

520 GW

Estimated wind potential in Uzbekistan

- China: a strategic shift from scale expansion to value — market-oriented pricing replaces 'grid parity'.
- India: 6.34 GW added in 2025, best since 2017 and +85% YoY; 100 GW wind targeted by 2030.
- Japan & South Korea: offshore recalibration — auction redesign, governance reform and cost pressures.
- Philippines & Vietnam: auction pipelines (GEAP, PDP8) turning long-standing ambition into deployment.
- Uzbekistan and Kazakhstan: Central Asia emerging as a new wind frontier on PPP and direct-agreement models.



China: from capturing scale to creating value

- Nearly 120 GW newly grid-connected in 2025; cumulative capacity 640 GW, over half the world's fleet.
- Wind and solar reached 1,840 GW, overtaking thermal capacity by roughly 300 GW; wind supplies 11% of generation.
- Document No. 136 replaced 'grid parity' with a market-oriented pricing and settlement mechanism.
- 124.4 GW of onshore capacity approved under the new mechanism in 2025, one-third above the previous year.
- Innovation: 26 MW offshore turbine grid-connected; 'AI+' energy policy and zero-carbon industrial parks.
- 15th Five-Year Plan (2026–2030): no less than 120 GW of new wind a year, including at least 15 GW offshore.

China at a glance

~53%

Electricity demand growth by 2035

13.3%

Share of wind in the 2030 power mix

4.2% of GDP

Energy transition investment, 2025

3.6 TW

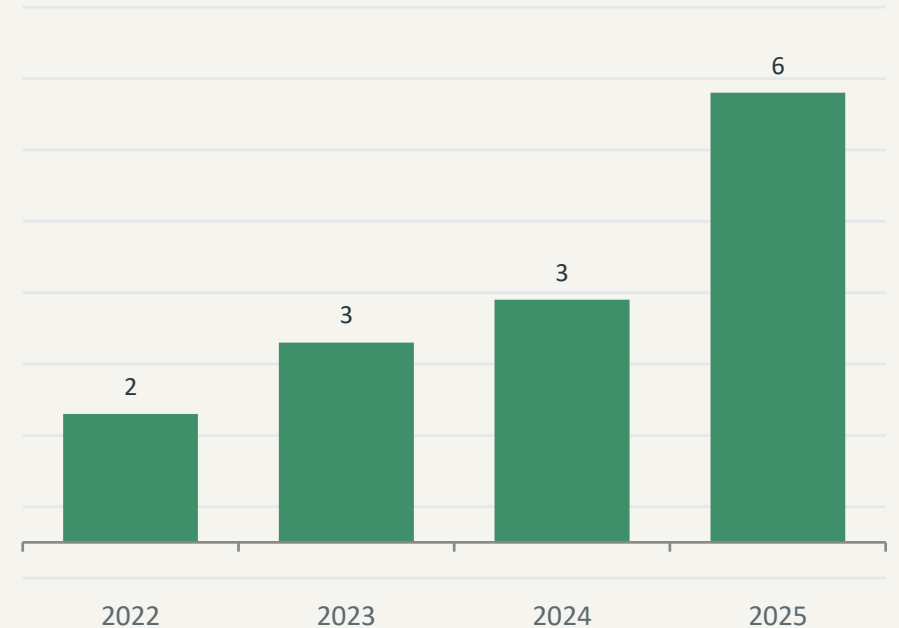
Wind + solar target by 2035 (NDC)

527 GW

New onshore wind forecast 2026–2030

India: exponential growth for energy security

- 6.34 GW of new onshore wind in 2025 — a record since 2017 and 85% above 2024; India reclaimed third place globally.
- 54.5 GW installed onshore as of January 2026; second-largest turbine assembly hub in Asia Pacific.
- Targets: 500 GW non-fossil capacity by 2030, of which 100 GW wind.
- Policy: 10 GW annual wind auction trajectory, RPO compliance, hybrid and FDRE tenders, C&I demand.
- Offshore: MNRE targets ~70 GW off Gujarat and Tamil Nadu; INR 7,453 crore (USD 893m) VGF and ISTS waiver to 2032.
- Barriers: right-of-way delays, grid connectivity, land acquisition, PPA finalisation; SECI cancelled 4.5 GW of offshore tenders in 2025.



India annual onshore wind installations (GW)

Source: GWEC Market Intelligence

Japan & South Korea: offshore recalibration

Japan

- 2025 a turning point: Mitsubishi-led consortium withdrew from all three Round 1 offshore sites on cost and supply chain pressures.
- Government prioritising delivery of awarded projects — LTDA participation, longer occupation periods, auction redesign.
- 16.8 MW Goto floating project began commercial operation in January 2026; Hibikinada expected online in H1 2026.
- GWEC's Bridging Forum, launched February 2026, meets monthly on auction and offtake reform.

South Korea

- Targets 12 GW onshore and 25 GW offshore wind by 2035; 100 GW of renewables by 2030.
- New Ministry of Climate, Energy and Environment (Feb 2026) consolidates energy and grid planning.
- Special Act effective March 2026: government-designated zones, Offshore Wind Committee, one-stop permitting.
- 390 MW Shinan Uido reached financial close on domestic capital — USD 511m from the National Growth Fund.
- 2030 offshore target trimmed to 10.5 GW from 14.3 GW on port, vessel and supply chain limits.

Philippines & Vietnam: from ambition to pipeline

Philippines

- Technical potential of 76.6 GW onshore and 178 GW offshore; installed onshore stood at just ~440 MW for a decade.
- Green Energy Auction Program maps at least 25 GW of renewables to 2035; GEA-4 alone awarded over 2.5 GW.
- GEA-5 offers 3.3 GW of fixed-bottom offshore for 2028–2030, with 4.2 GW more due for 2030–2035.
- 100% foreign ownership and 'Green Lanes' for strategic investment de-risk the market.

Vietnam

- Revised PDP8 targets 6–17 GW of offshore wind by 2030–2035 and 113–139 GW by 2050.
- December 2025 National Assembly resolution creates a fast-track mechanism for early offshore projects.
- Decree 65/2025 covers seabed allocation and survey licensing; Decree 58/2025 extends CfD terms to 15 years.
- Onshore and nearshore reached 5.5 GW; more than 2.1 GW of installed capacity still awaits COD approval.
- GWEC forecast: 15 GW of onshore added in 2026–2030, taking the total to 20.5 GW by 2030.

Uzbekistan: Central Asia's emerging wind hub

- Uzbekistan 2030 strategy targets around 40% of electricity from renewables; ~20 GW of wind and solar by 2030.
- Estimated wind potential of about 520 GW; a further 3 GW of wind expected to be commissioned by end-2026.
- Two procurement routes: direct agreement under the Investment Law, and competitive PPP tenders with state-backed PPAs.
- Flagship projects: 500 MW Bash and 500 MW Dzhankeldy (ACWA Power / China Southern Power Grid) and 521.7 MW Zarafshan (Masdar), online December 2025.
- China is the largest trade partner (USD 17bn, 21.2% of trade); ~3 GW of turbine orders to Chinese OEMs, with Sany and Sinoma planning local factories.
- Grid remains the bottleneck — ageing transmission risks curtailment without new high-voltage links to demand centres.



1.5 GW

Combined capacity of the Bash, Dzhankeldy and Zarafshan wind farms in the Bukhara region

Middle East & Africa: a record year, from a small base

+32%

YoY growth in new capacity in 2025

4 GW+

South Africa operational fleet — Africa's largest

16 GW

Saudi Arabia wind target under Vision 2030

35 GW

Forecast additions 2026–2030

- Egypt: renewables to exceed 42% of the mix by 2030, rising to 60% by 2040; a 1 GW West Sohag tender relaunches competitive procurement.
- Kenya: renewables above 80% of the power mix; Africa's first privately financed transmission project signed in 2025.
- Saudi Arabia: over 1 GW installed in 2025 and 3 GW of wind contracted at Starah and Shaqrah.
- South Africa: IRP 2025 targets 43 GW of new wind by 2042 — around 30% of the generation mix.
- Türkiye: 16 GW installed, a record 2.1 GW added in 2025, and 120 GW of wind and solar targeted by 2035.



Egypt & Kenya: procurement and grid reform

Egypt — back in growth mode

- 1.15 GW commissioned in H2 2025: the 650 MW Red Sea project (Orascom / ENGIE / Toyota Tsusho) and 500 MW Amunet (AMEA Power).
- 1 GW West Sohag tender launched in early 2026 — the first competitive round in over seven years, under an IPP/BOO framework.
- 1.3 GW under construction and close to 10 GW in development, including 900 MW Shadwan (Scatec) and 2 GW Hurghada (ACWA Power).
- Grid investment remains largely public; new financing models are under consideration.

Kenya — reform unlocks demand

- 435.5 MW installed — the second-largest variable renewable source after hydropower.
- Anchored by Lake Turkana (310 MW), Kipeto (~100 MW) and Ngong Hills (~25.5 MW).
- Wind generation rose about 13% in H1 2025, led by Lake Turkana.
- Africa's first privately financed transmission project: KES 40.4bn (USD 311m) KETRACO / Africa50 / Power Grid of India PPP.
- Open Access Regulations would enable wheeling and captive supply — but the best wind sites sit far from demand centres.

Saudi Arabia: wind at the heart of a digital economy

- Vision 2030 targets 50% renewables, including 16 GW of wind; Dumat al-Jandal (400 MW) is the only operating wind farm to date.
- 2025 NREP deals cover seven utility-scale plants totalling 15 GW, including 3 GW of wind at Starah (2 GW) and Shaqrah (1 GW).
- World-record low pricing: 1.5 GW awarded at Dwadmi at about USD 1.338 cents/kWh.
- 12 wind projects installed, in development or tendered according to the KAPSARC renewables tracker.
- Wind and solar underpin the AI build-out — HUMAIN and the 1.5 GW net-zero DataVolt campus at Oxagon.
- Constraints: workforce and skills, plus regional conflict risk affecting 2027–2028 commissioning timelines.

Project	Status	COD	MW	Developer
Starah	Development	2028	2,000	ACWA
Dwadmi	Development	2028	1,500	KEPCO
Al Qirah	Tendered	2029	1,500	—
Bilghah	Tendered	2029	1,300	—
Baeyda'a Nathel 1	Tendered	2029	1,000	—
Shegran	Tendered	2029	900	—
Samha	Tendered	2029	800	—
Yunbu	Development	2027	700	ACWA
Al Ghat	Development	2026	600	Marubeni
Dumat al-Jandal	Installed	2022	400	Masdar / EDF

Saudi wind pipeline — source: KAPSARC tracker

South Africa: from targets to delivery

4 GW+

Operational wind capacity —
Africa's largest

2.8 GW

Currently under construction

60 GW+

Total project pipeline (17 GW
advanced)

43 GW

New wind targeted by 2042
under IRP 2025

- IRP 2025, approved in October 2025, plans over 114 GW of new capacity by 2042 — wind is ~49% of the renewable component and ~30% of the mix.
- Electricity Regulation Amendment Act underpins market restructuring and an independent transmission system operator; Eskom unbundling continues via NTCSA.
- Transmission Development Plan 2025: ~14,500 km of new high-voltage lines and ~133,000 MVA of transformer capacity, needing ZAR 440bn (USD 25.9bn) to 2034.
- Western and Eastern Cape have reached full connection capacity; a NERSA-approved curtailment framework (to March 2028) unlocks ~1.48 GW more.
- At ~4% curtailment, connectable capacity in those regions could rise from ~5,625 MW to ~7,205 MW by 2028.
- South African Wholesale Electricity Market (SAWEM) implementation begins Q3 2026.

Türkiye: where energy and industrial policy converge

- Installed wind capacity reached about 16 GW by January 2026 after a record 2.1 GW added in 2025.
- Wind and solar combined now exceed 40 GW; the 2035 target of 120 GW implies 2–2.5 GW of wind a year.
- From deployment market to industrial hub: Nordex Enerji supplies YEKA projects (including ~750 MW with Enerjisa Üretim); Goldwind operates 400 MW with a ~700 MW pipeline and a blade plant planned in Izmir.
- Pre-licences granted for roughly 15–16 GW of wind-plus-storage, such as the 132 MWh BESS at the Göktepe wind farm.
- Offshore: no capacity installed yet, but 5 GW targeted by 2035, mostly floating, and now included in the YEKDEM support scheme.
- GWEC forecast: Türkiye takes ~9% of European onshore additions in 2026–2030, second only to Germany.

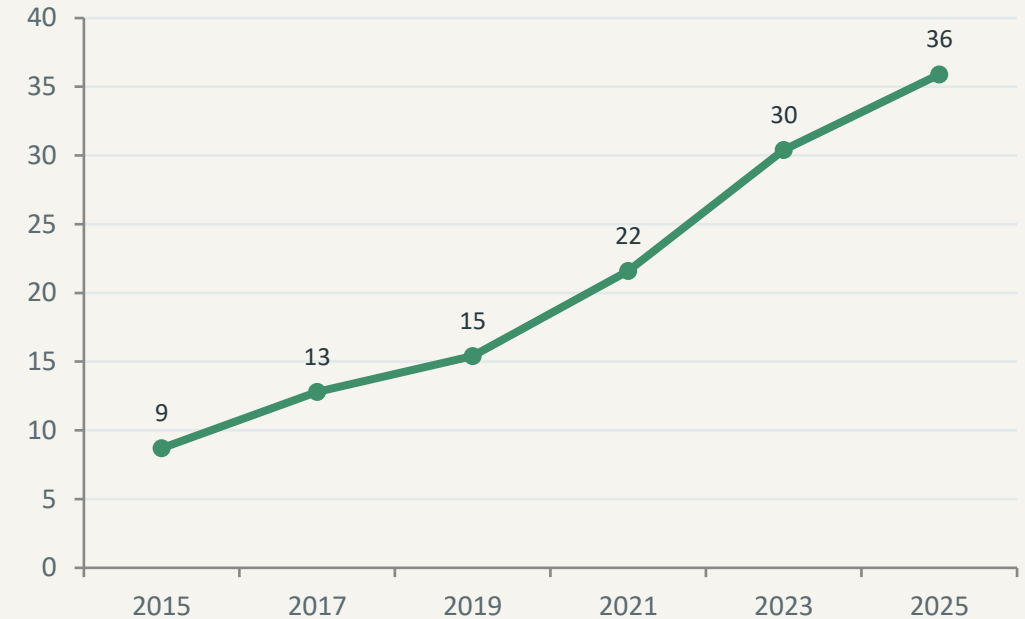


COP31 host

Türkiye hosts COP31 in 2026 as wind shifts from a growth sector to core national infrastructure.

Brazil: curtailment at home, opportunity offshore

- Only 2.3 GW installed in 2025 — the lowest since 2020 and almost a third below 2024; cumulative capacity is close to 36 GW.
- Curtailment ordered by the system operator (ONS) has caused losses in the billions; Law No. 15.269/2025 governs reimbursement and sets storage guidelines.
- The first battery auction, scheduled for 2026, is seen as the key technical fix for surplus generation.
- Offshore Wind Legal Framework (Law No. 15.097/2025) is in force, but no maritime area has yet been transferred.
- IBAMA issued the first offshore environmental licence in June 2025 for a SENAI pilot off Rio Grande do Norte.
- Demand drivers: industrial electrification, data centres, green hydrogen and the SBCE emissions trading system.



Brazil cumulative wind capacity (GW) — source: ABEEólica

55 GW cumulative capacity projected by 2032

Chile & Colombia: record growth and a first tender

Chile — record wind growth

- 1.2 GW added in 2025, up 24% on 2024; installations tripled year on year and passed 1 GW for the first time.
- Cumulative capacity near 6 GW across 71 projects — 16% of installed capacity, overtaking natural gas.
- Wind and solar supplied almost 38% of energy injected into the system; 67% of generation was renewable.
- Storage scaling fast: 1.5 GW operating, 7.3 GW under construction and over 27 GW in development.
- Offshore potential of ~957 GW, roughly 12 times onshore capacity; an Offshore Wind Roadmap is being drafted.

Colombia — a window of opportunity

- NDC 3.0 commits to a 51% cut in emissions by 2030 and embeds a 6 GW renewables target.
- Only one-third of the 6 GW target for end-2026 had been achieved by December 2025.
- Utility-scale pipeline is effectively paralysed by social opposition, licensing delays and grid connection constraints.
- The first offshore tender allocated an exploration area for up to 500 MW in the Atlántico region, backed by a CfD scheme.
- Electricity market and permitting reform is now the binding constraint on security of supply.

Market Status 2025

A record 165 GW commissioned — the best year in the industry's history

2025: the best year ever for wind

165 GW

New capacity commissioned in 2025 (+40% YoY)

1,299 GW

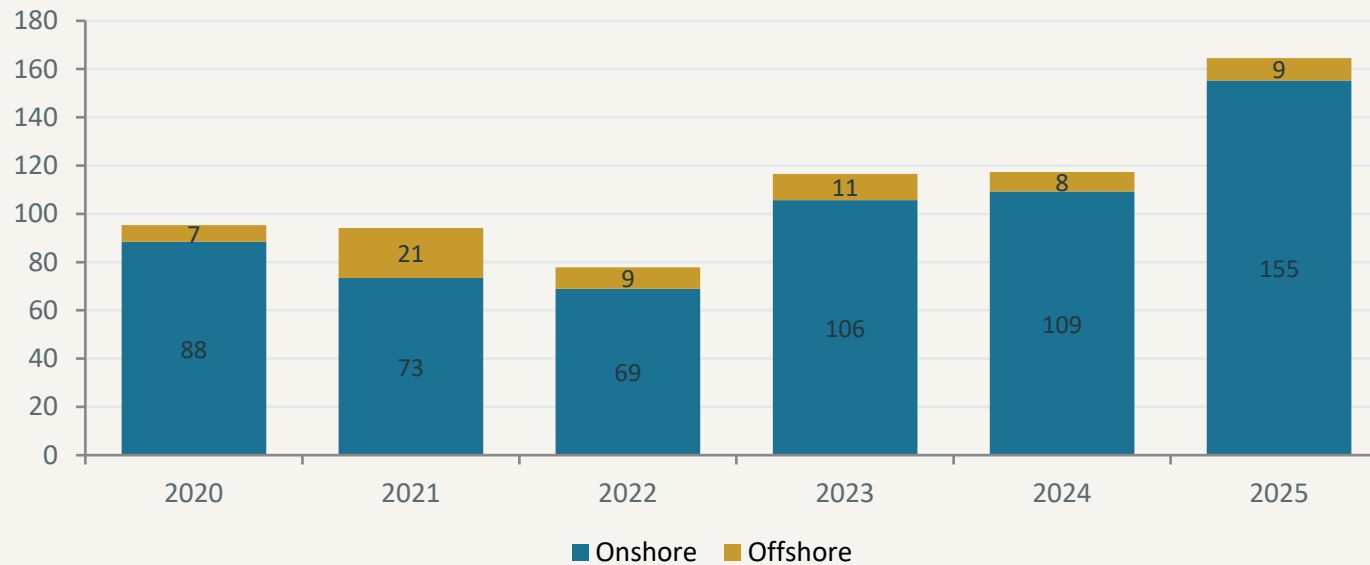
Total installed wind capacity (+14%)

155 GW

New onshore — first year above 150 GW

9.3 GW

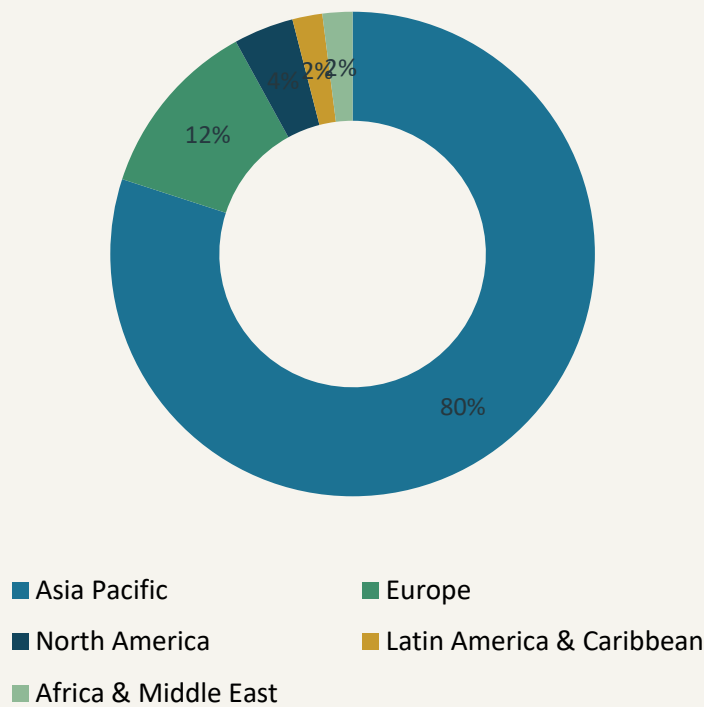
New offshore — third highest on record



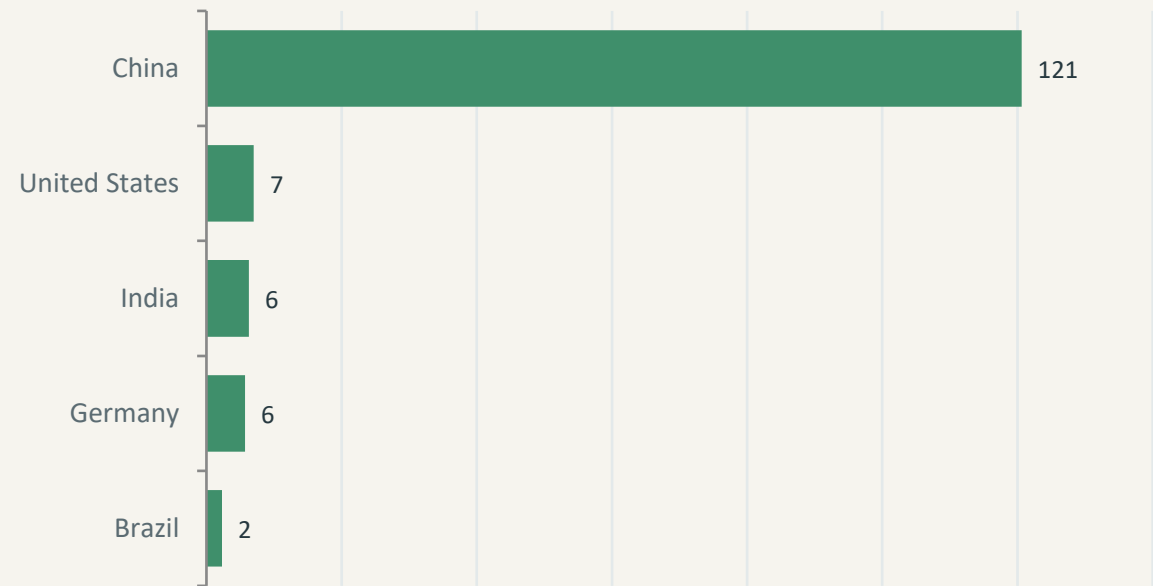
Global annual new installations (GW)

- China, the US, Germany, India and Brazil remain the top five, making up 86% of additions — and 75% of total capacity.
- Europe passed 300 GW cumulative, commissioning 19.1 GW (+16%), of which 15.1 GW in the EU-27.
- 178 GW was mechanically installed, but over 13 GW in China and the US was not grid-connected.

Where the capacity landed in 2025



Share of 164.6 GW of new capacity by region

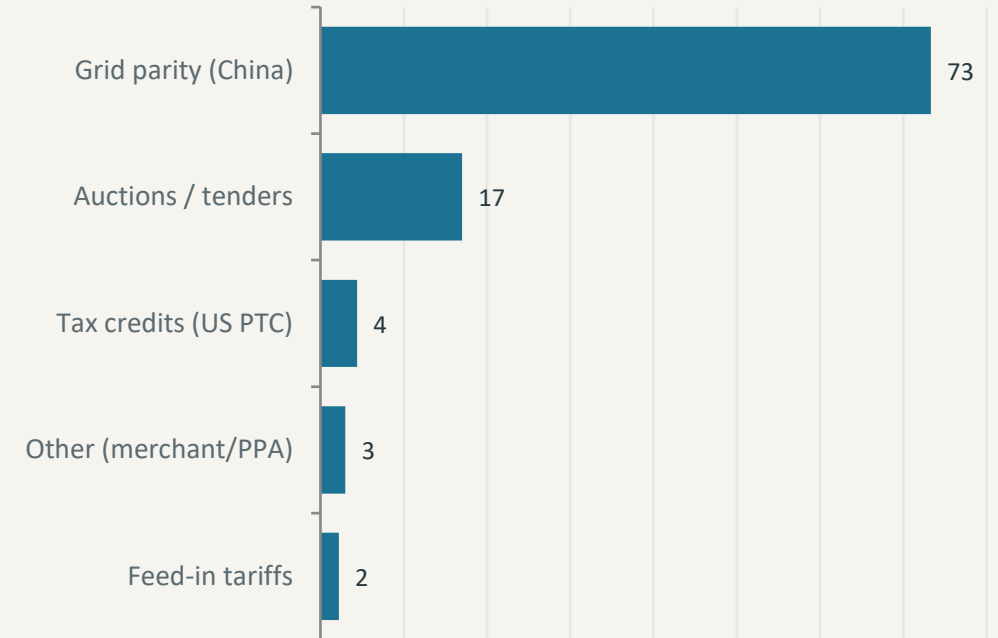


Top five markets for new installations, 2025 (GW, onshore + offshore)

- Asia Pacific and Africa & Middle East both set records; Latin America was the only region to shrink, down 24%.
- North America rebounded, with US onshore installations up 71% year on year.

Onshore wind: 155 GW across 55 countries

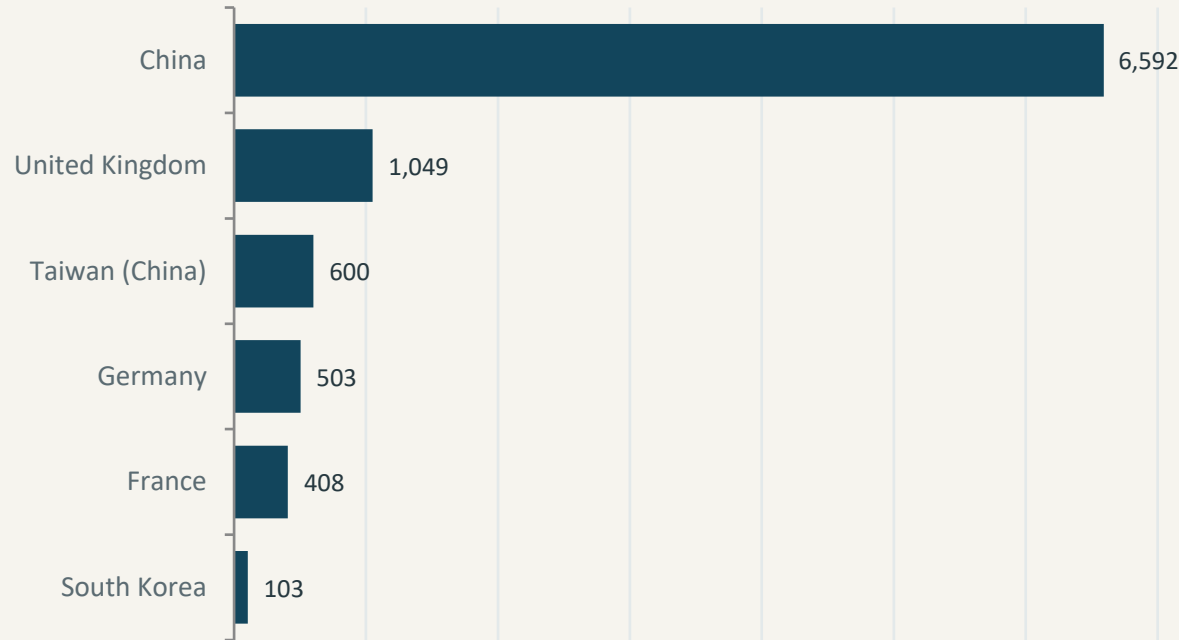
- Onshore additions grew 42% YoY; cumulative onshore capacity passed 1,200 GW.
- China alone made up 73% of global onshore additions, commissioning 114 GW — 49 GW in H1 and 65 GW in H2.
- China's new market-oriented pricing scheme replaced 'grid parity'; 124.4 GW was approved under it in 2025.
- US onshore rebounded to nearly 7 GW, the first rise after four years of decline — but the OBBB is phasing out tax credits.
- Germany added 5.2 GW, its second-highest year; Türkiye topped 2 GW for the first time.
- Excluding China, 32.8 GW was awarded at auction — 39% below 2024; Europe awarded 19.2 GW, led by Germany with 11 GW.



2025 onshore additions by market support mechanism (%)

Grid parity and auctions together account for 90.3%

Offshore wind: 9.2 GW connected, 92.3 GW installed



New offshore capacity commissioned in 2025, by market (MW)



- New additions were 16% higher than 2024 — the third-best year in offshore history.
- China led for the eighth year running with 6.6 GW, taking its fleet to 48.4 GW and 52% of global capacity.
- Europe commissioned just under 2 GW across five wind farms in three markets — a 24% fall on 2024.
- The UK connected 1,049 MW, including Dogger Bank Phase A and the completion of Neart na Gaoithe.
- The US has 806 MW operating at Vineyard Wind 1, still the only offshore fleet in the Americas.
- No floating capacity was commissioned — the first such year since 2015.
- Only 11.4 GW was awarded worldwide, one-fifth of the 2024 record, with 6.1 GW of failed auctions in Europe.

What held the market back in 2025

Grid & transmission

Congestion and slow build-out delayed connections in the US, Brazil, South Africa and Uzbekistan; over 13 GW installed globally was not grid-connected.

Permitting

Slow consenting weighed on Latin America, Japan and Europe; poor auction design left 6.1 GW of European offshore tenders undersubscribed.

Policy reversals

The OBBB accelerated the phase-out of US tax credits, and BOEM cancelled designated offshore wind areas; New Jersey and New York solicitations were withdrawn.

Curtailement & demand

Latin America fell 24%, driven by a 31% drop in Brazil on curtailment, weak demand growth and an unsupportive policy environment.

Cost of capital

Higher interest rates and supply chain pressure pushed developers to withdraw from awarded projects, notably in Japan.

Market transition

China's move from grid parity to market-oriented pricing initially created uncertainty on returns — but the industry adapted quickly.

Market Outlook 2026–2030

969 GW of new capacity expected — a 5.2% compound annual growth rate

969 GW expected over the next five years

5.2%

CAGR for new installations,
2026–2030

194 GW

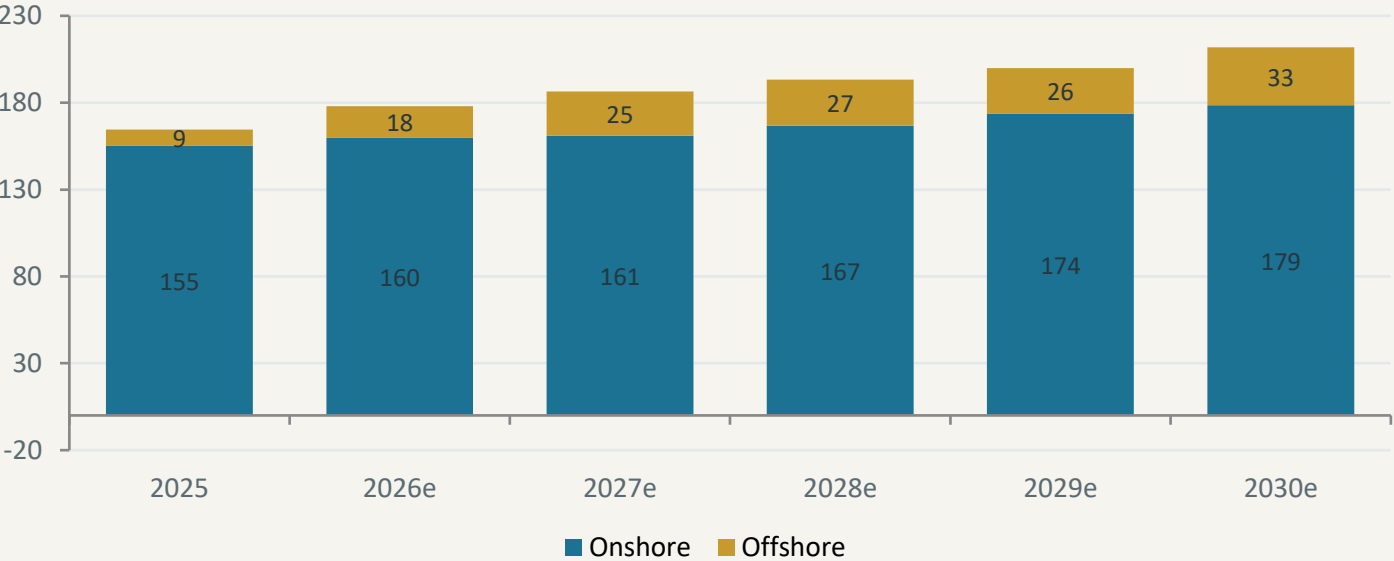
Average annual additions
through 2030

178 GW

Expected in 2026 — a new
record

3x

Offshore additions by 2030 vs
2025



New installations outlook, onshore and offshore (GW)

- Onshore CAGR of 2.8%: 840 GW in total, averaging 168 GW a year.
- Offshore CAGR of 29%: 129 GW in total, rising from 9 GW in 2025 to 33 GW in 2030.
- Offshore lifts its share of new installations from 6% today to 16% by 2030.
- China drives 63% of additions in 2026, but over half of global growth comes from outside China by 2030.

Seven pillars supporting continued growth

1

China's system-level transformation

3.6 TW of wind and solar by 2035 under its NDC, making 100 GW+ of annual wind the new norm.

2

European energy security

Clean Energy Investment Strategy and grid packages speed deployment — though trajectories remain insufficient.

3

US policy mismatch with reality

IRA rollback reshapes the landscape, but AI-driven demand keeps wind central to affordability.

4

India's rapid scaling

500 GW of non-fossil capacity by 2030, supported by a strong domestic supply chain.

5

Offshore strength despite recalibration

The 2026 Hamburg Declaration signals government–industry risk-sharing rather than retreat.

6

Emerging-market momentum

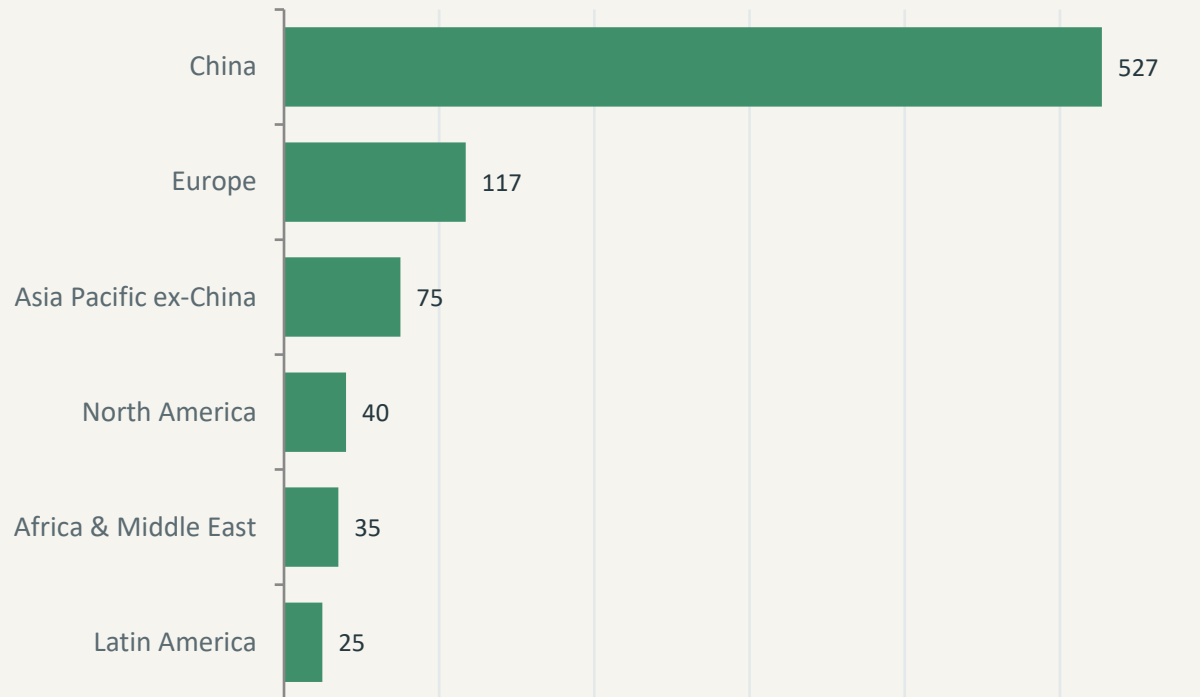
Southeast Asia, Central Asia and the Middle East & Africa head for record annual installations.

7

The Age of Electricity

Nations leveraging wind resource secure energy independence — with political commitment and upfront investment.

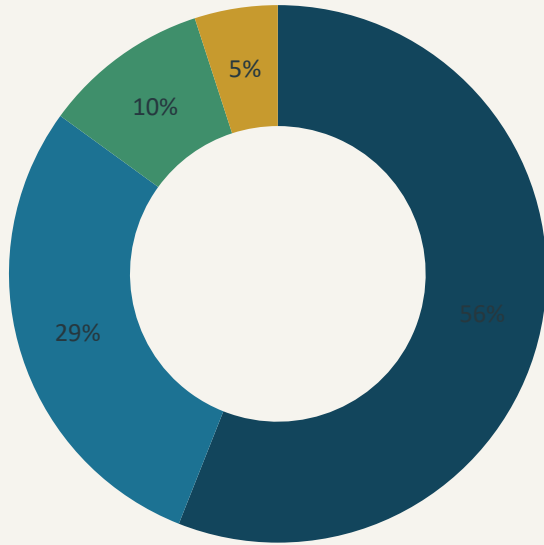
Regional onshore outlook: 840 GW to 2030



Forecast new onshore installations by region, 2026–2030 (GW)

- China and Europe are the backbone, at 77% of projected capacity; China averages 105 GW a year.
- Europe: 117 GW under WindEurope's central scenario, 83% of it in the EU — Germany takes 40%, ahead of Türkiye (9%) and the UK (6.5%).
- India adds 41 GW; Vietnam 15 GW, taking its fleet to 20.5 GW by 2030.
- North America dips mid-period as tax credits phase out; 75% of its 40 GW is in the US.
- Africa & Middle East (35 GW) is set to overtake Latin America for the first time — Saudi Arabia alone could see over 18 GW across the Middle East.
- Latin America adds 24.6 GW, with Brazil, Chile, Mexico, Argentina and Colombia at 93% of the total.

Offshore outlook: 129 GW and a 29% CAGR



■ China ■ European Union ■ Asia Pacific ex-China ■ United States

Share of 129 GW of offshore additions, 2026–2030

- Annual additions average 26 GW, tripling from 2025 levels by 2030; China and Europe command 86% of new capacity.
- China adds 73 GW and consolidates APAC leadership, ahead of Taiwan (6 GW), Japan (3.2 GW), South Korea (3.2 GW) and the Philippines (1 GW).
- Europe feeds more than 37 GW into the grid, 16 GW of it in the UK on the back of CfD rounds 3, 4 and 6 — plus a record 8.4 GW awarded in AR7.
- Germany follows with 7.6 GW, then Poland (6 GW), the Netherlands (3.6 GW), France (1.7 GW) and Denmark (1.4 GW).
- US: about 6 GW is expected in 2026–2028 from projects already under construction, with little prospect of additions in 2029–2030.
- Latin America sees a single 25 MW demonstration project before the end of the decade.

Key takeaways

Record delivery

165 GW in 2025 proves the supply chain can scale; total capacity stands at 1,299 GW.

Concentration is the risk

Five markets account for 86% of additions and China alone for 73% of onshore — diversification is the story of 2030.

Offshore is recalibrating, not retreating

A 29% CAGR follows a weak auction year; policy design, not fundamentals, is the binding constraint.

Grids are the bottleneck

Curtailment, congestion and permitting delays cost real capacity in Brazil, South Africa, the US and Uzbekistan.

New entrants are arriving

Saudi Arabia, Uzbekistan, the Philippines and Kenya turn pipelines into projects; Africa & Middle East overtakes Latin America.

Energy security is the driver

In a volatile geopolitical landscape, wind is a homegrown, scalable hedge against fossil fuel price shocks.

“Wind is a limitless, affordable, scalable and homegrown power source — crucial to strengthening energy sovereignty.”

GAwC Renewables
